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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,571	04/08/2004	Corrado Carretti		8577

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EXAMINER

ANTHONY, JOSEPH DAVID

ART UNIT PAPER NUMBER

1714

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,571

Applicant(s)

CARRETTI ET AL.

Examiner

Joseph D. Anthony

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 15-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 17-28 is/are rejected.
- 7) ☒ Claim(s) 15 and 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 17-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,793,461. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is massive overlap between the pending claims and the claims of said patent.

Allowable Subject Matter

3. Claims 15-16 are allowed.

Claims Free of Prior-Art Rejections

4. Claims 1 and 15-28 are free of any prior-art rejections. Highly relevant pieces of prior-art are deemed to be as followed:

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A) The closest piece of prior-art is deemed to be Schiabel et al. U.S. Patent Number 5,312,607. Schiabel et al teach a process for the sorption of residual gas in a vessel by means of a non-activated, non-evaporated barium getter. It comprises the steps of reducing an alloy of $Ba_{\text{sub}.z} + (Ba_{\text{sub}.1-x} A_{\text{sub}.x})_{\text{sub}.n} B_{\text{sub}.m}$ to a particle size of less than 5 mm, under vacuum or an inert gas atmosphere and then placing the particulate alloy in the vessel. Upon exposing the particulate alloy to the residual gas in the vessel at room temperature the gas is sorbed. The metal A is a metal selected from the group consisting of elements of Group IIa of the periodic table of elements, excluding barium. The metal B is selected from the group consisting of elements of Group Ib, IIb, IIIa, IVa and Va of the periodic table of elements. Furthermore $n=1, 2, 3$ or 4 and $m=1, 2$ or 5 , whereas $0 \leq x \leq 0.5$ and z is a value from zero to such a value that the total barium in the alloy is less than 95% by weight of the alloy. Examples 8-9 teach the production of and the use of a Ba-Ca-Al alloy as a getter material.

Applicant's claims are all deemed to be patentable distinct over said examples and the Schiabel et al patent taken as a whole, due to applicant's particularly claimed concentration ranges for the Ba, Ca and Al components found within applicant's ternary getter alloy. Specifically applicant's claimed ternary alloy getter material has a far higher calculated ratio of calcium to barium as compared to the Ba-Ca-Al ternary alloy taught and suggested by the Schiabel et al patent. Please see applicant's Remarks on page 5 of the amendment filed 04/08/2004 in the Parent

Application Now U.S. Patent Number 6,793,461. The present examiner is incorporating said applicant's remarks in the Parent Application into his reasons for allowance for the present application.

B) Kozak et al. U.S. Patent Number 3,734,714 teaches a continuous process and apparatus for economically producing a steel treating agent of a Ca-Ba-Al-Si containing alloy consisting essentially of about 8-13% barium, about 9-14% calcium, about 17-24% aluminum, about 37-43% silicon and up to about 25% of at least one metal selected from a group consisting of iron, nickel, chromium, cobalt and manganese.

Applicant's invention is patentable distinct over Kozak et al's Ca-Ba-Al-Si containing alloys because applicant's claimed concentration ranges for the Ca-Ba-Al components within the claimed ternary alloy are far different from those taught and suggested by Kozak et al.. As an example, applicant's ternary alloy used in claim 1, requires between 30 and 45% by weight of calcium, which is far higher than the disclosed about 9-14% by weight calcium used in Kozak et al's alloys.

C) Hilty et al. U.S. Patent Number 3,275,433 teach steel treating agent consisting of Ba-Ca-Al-Fe-Mn-Si. The compositional ranges disclosed are about 7 to 21% barium, about 10 to 21% calcium with the aggregate of barium and calcium being from about 17 to about 40%; about 8 to 35% aluminum, up to 25% in the aggregate of iron and manganese, balance silicon. Particularly effective

ranges for aluminum, barium and calcium are as followed: Aluminum, 12-15%; barium, 10-12%; calcium, 18-20%.

Applicant's invention is patentable distinct over Hilty et al's Ca-Ba-Al-Fe-Mn-Si alloys because applicant's claimed concentration ranges for the Ca-Ba-Al components within the claimed ternary alloy are far different from those taught and suggested by Hilty et al.. As an example, applicant's ternary alloy used in claim 1, requires between 30 and 45% by weight of calcium, which is far higher than the disclosed about 10 to 21% by weight calcium used in Hilty et al's alloys. Likewise, applicant's ternary alloy used in claim 1, requires between 50 and 60% by weight of aluminum, which is far higher than the disclosed about 8 to 35% by weight aluminum used in Hilty et al's alloys.

Telephone Interview

5. The examiner acknowledges the telephone interview of 11/12/2004 wherein applicant's representative William Ahmann agreed to fax a Terminal Disclaimer over the Parent Application S.N. 10/282,715 Now U.S. Patent Number 6,793,461 to put the present application in condition for allowance. Mr. Ahmann called the examiner to inform him that the Terminal Disclaimer was fax to the PTO on Monday 11/15/04. Unfortunately as of today, 12/09/04, no record of the faxed Terminal Disclaimer, can be found in PALM. As such, due to time constraints on the examiner, a non-final office action must be sent out on this application. Once the Terminal Disclaimer is imputed into PALM and approved, a notice of allowance will be sent out by the examiner.

Prior-Art Cited But Not Applied

6. Any prior-art reference which is cited on FORM PTO-892 but not applied, is cited only to show the general state of the prior-art at the time of applicant's invention.

Examiner Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (571) 272-1119. The centralized FAX machine number is (703) 872-9306. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.



Joseph D. Anthony
Primary Patent Examiner
Art Unit 1714

12/09/04